4. (amended) An X-ray detector as claimed in claim 1, characterized in that the data processing unit (11) is arranged in such a manner that it determines the mean energy of the detected X-ray quanta from the signals from the counter output (8) and the signals from the integrator output (9).

5. (amended) An X-ray detector as claimed in claim 1, characterized in that the evaluation unit (10) includes an input amplifier (2) which preprocesses the charge signal presented by the conversion unit (1), notably amplifies it, and conducts the signal thus preprocessed to the counting channel (5) and to the integrator channel (7).

6. (amended) An X-ray detector as claimed in claim 1, characterized in that it includes a plurality of conversion units (1) which are arranged so as to be distributed in one plane, that is, preferably in the form of a matrix.

## REMARKS

The foregoing amendments to the claims were made solely to avoid filing the claims in the multiple dependent form so as to avoid the additional filing fee.

The claims were not amended in order to address issues of